

DERWENT-ACC-NO: 1985-267018  
DERWENT-WEEK: 198543  
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TITLE: Microwave switch with piezoelectric device - has  
two lever arms  
flexible beam member and transmitting spring NoAbstract Dwg  
0/4

PATENT-ASSIGNEE: NEC CORP[NIDE]

PRIORITY-DATA: 1984JP-0036818 (February 27, 1984)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE
PAGES	MAIN-IPC	
JP 60180036 A	September 13, 1985	N/A
006	N/A	

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO
APPL-DATE		
JP 60180036A	N/A	1984JP-0036818
February 27, 1984		

INT-CL (IPC): H01H057/00

ABSTRACTED-PUB-NO:

EQUIVALENT-ABSTRACTS:

TITLE-TERMS:

MICROWAVE SWITCH PIEZOELECTRIC DEVICE TWO LEVER ARM  
FLEXIBLE BEAM MEMBER  
TRANSMIT SPRING NOABSTRACT

DERWENT-CLASS: V03

EPI-CODES: V03-D05;

CLIPPEDIMAGE= JP401217982A

PAT-NO: JP401217982A

DOCUMENT-IDENTIFIER: JP 01217982 A

TITLE: PIEZOELECTRIC LINEAR ACTUATOR

PUBN-DATE: August 31, 1989

INVENTOR-INFORMATION:

NAME

TAKAHARA, KENICHI

ASSIGNEE-INFORMATION:

NAME

TOSHIBA CORP

COUNTRY

N/A

APPL-NO: JP63042375

APPL-DATE: February 26, 1988

INT-CL (IPC): H01L041/08

ABSTRACT:

PURPOSE: To obtain a piezoelectric linear actuator which requires only ordinary accuracy of mechanical working, allows gaps to be regulated easily, is operable with larger strokes and alleviates limits of loads, by providing a plurality of clamp arms for constituting a clamp section, so that displacement of a clamp piezoelectric element is amplified by these clamp arms to be utilized for clamping an object to be clamped.

CONSTITUTION: A flexible hinge 13 having constricted profile is provided close to and on the upper side of a hinge 14 of each of clamp arms 6a-6c and 11a-11c. One end of each of clamp piezoelectric elements 5a-5c is secured thereto while the other end is secured to a flange 29 formed on the outer periphery of

movable bases 7, 9. A rotating radius between the hinges 13, 14 is shorter than a rotating radius between the hinge 14 and a clamp pad 16 of each clamp arm. Accordingly, when the piezoelectric element is extended in the directions as indicated by the arrows, force is applied to the upper hinge 13 serving as a force point, and the distal end of the clamp arm is rotated round the fulcrum, that is the lower hinge 14 at the proximal end of the clamp arm, and pressed against the outer peripheral surface of a shaft 10 to clamp the same.

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CLIPPEDIMAGE= JP402218579A

PAT-NO: JP402218579A

DOCUMENT-IDENTIFIER: JP 02218579 A

TITLE: CHUCK USING LAMINATION TYPE PIEZOELECTRIC CERAMICS

PUBN-DATE: August 31, 1990

INVENTOR-INFORMATION:

NAME

YAMAUCHI, MASAYOSHI

MINEGISHI, KEIICHI

ASSIGNEE-INFORMATION:

NAME

SMC CORP

COUNTRY

N/A

APPL-NO: JP01039532

APPL-DATE: February 20, 1989

INT-CL (IPC): B25J015/00;B23Q007/04 ;B25J019/00

ABSTRACT:

PURPOSE: To miniaturize a chuck and to easily control the displacement amount of an arm, in other words the holding force of a work by constituting so as to drive a pair of the arms holding the work by a lamination type piezoelectric ceramics.

CONSTITUTION: When voltage is impressed on a lamination type piezoelectric ceramics 2, the lamination type piezoelectric ceramics 2 is displaced analogically according to the impressed voltage to press the base parts 4a, 5a medium of a pair of arms 4, 5. In this case, the opposed arms side of the base parts 4a, 5a of the arms 4, 5 are rockably linked to a support base 3 by hinge parts 6, 7 respectively. So that, a pair of the arms 4, 5

are turned in the  
direction that the gap of between mutual arms becomes  
narrow by the hinge parts  
6, 7. Consequently, a desired work can be held by a pair  
of the arm 4 and 5  
with the lamination type piezoelectric ceramics 2 as the  
power source, the  
displacement amount of the arms 4, 5, in other words the  
holding force of the  
work can be controlled by the high and low of the  
impressing voltage, and so  
the control is easy.

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CLIPPEDIMAGE= JP410248278A

PAT-NO: JP410248278A

DOCUMENT-IDENTIFIER: JP 10248278 A

TITLE: DRIVING DEVICE USING ELECTROMECHANICAL TRANSDUCER  
ELEMENT

PUBN-DATE: September 14, 1998

INVENTOR-INFORMATION:

NAME

YOSHIDA, RYUICHI  
OKAMOTO, YASUHIRO  
ARAYA, SATOSHI  
NAKANO, HARUYUKI

ASSIGNEE-INFORMATION:

NAME

MINOLTA CO LTD

COUNTRY

N/A

APPL-NO: JP09061698

APPL-DATE: March 3, 1997

INT-CL (IPC): H02N002/00

ABSTRACT:

PROBLEM TO BE SOLVED: To provide a driving device using an electromechanical transducer element, in which there is no risk of the damage of the driving device and a driven member even when unintentional external force is applied to the device.

SOLUTION: In the driving, in which a slider block 31 is coupled frictionally with a driving shaft 16 reciprocated and vibrated by displacement by the expansion and contraction of a piezoelectric element 39, constitution, in which the slider block 31 is fixed onto the driving shaft 16 at the stoppage of

driving, is formed. That is, an arm member 38 is combined with a hinge section 34 by a hinge section 38a, and the piezoelectric element 39 is arranged between a forked member 32 and the arm member 38. When the slider block 31 is fixed onto the driving shaft 16, voltage is applied to the piezoelectric element 39, and the displacement of elongation is generated in the thickness direction. Accordingly, bonding sections 32a, 33a of the forked member 32 are brought into press-contact firmly with the driving shaft 16, and the slider block 31 can be fastened onto the driving shaft 16.

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	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments
1	BRS	L1	11	piezoelectric adj1 stack same adjust\$4 adj2 (screw or bolt\$3)	USPA T; US-P GPUB ; EPO; JPO; DERW ENT; IBM TDB	2003/01/3 1 09:33	
2	BRS	L2	0	piezoelectric adj1 stack same adjust\$4 adj2 (screw or bolt\$3)	USOC R	2003/01/3 1 09:40	
3	BRS	L3	16	piezoelectric adj1 stack and adjust\$4 adj2 (screw or bolt\$3) and (preload or pre adj1 load)	USPA T; US-P GPUB ; EPO; JPO; DERW ENT; IBM TDB	2003/01/3 1 09:41	



	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments
1	IS&R	L1	1359	(310/328).CCLS.	USPA T	2003/01/3 1 06:34	
2	IS&R	L2	228	(310/328).CCLS.	US-P GPUB ; EPO; JPO; DERW ENT; IBM TDB	2003/01/3 1 06:42	
3	BRS	L3	726	(piezoelectric or electrostrictive or electromechanical) same arm same (flex\$4 or pivot\$4)	USPA T	2003/01/3 1 06:53	
4	BRS	L4	37	(piezoelectric or electrostrictive or electromechanical) same arm same (flex\$4 or pivot\$4 or hinge\$4) not 13	USPA T	2003/01/3 1 06:55	
5	BRS	L5	358	(piezoelectric or electrostrictive or electromechanical) same arm same (flex\$4 or pivot\$4 or hinge\$4)	US-P GPUB ; EPO; JPO; DERW ENT; IBM TDB	2003/01/3 1 06:55	